Personality and individual difference correlates of positive body image

Viren Swami⁎, Maria Hadji-Michaelb, Adrian Furnhamb

⁎Department of Psychology, University of Westminster, 309 Regent Street, London W1B 2UW, United Kingdom
bDepartment of Psychology, University College London, United Kingdom

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ABSTRACT

In the present study, 101 women and 106 men from a community sample of British adults completed the Body Appreciation Scale (BAS), along with a battery of individual difference measures and demographics. Contrary to previous findings, there were no sex differences in BAS scores, either before or after controlling for individual differences in other measures. The results also showed that, moderating for participants’ sex, self-assessed attractiveness, educational qualifications, neuroticism, extraversion, and BMI were all significant predictors of body appreciation. In addition, higher media consumption and higher (male-stereotypic) instrumentality were associated with, but did not predict, higher body appreciation. These results are discussed in relation to the extant work on body image.

In line with a recent focus on positive psychology (Kahneman, Diener, & Schwarz, 2003), a number of authors within the body image literature have lamented the fact that body image is often defined as a negative orientation towards one’s body (e.g., Avalos, Tylka, & Wood-Barcalow, 2005). This has led recently to the development of a number of scales designed to explicitly measure positive body image, such as the Body Appreciation Scale (BAS; Avalos et al., 2005). The 13-item BAS measures four related aspects of body image, namely: (1) favourable opinions of one’s own body; (2) acceptance of the body in spite of imperfections; (3) respect for the body, particularly in relation to its needs; and (4) protection of the body, including rejection of unrealistic ideals.

Recent work using the BAS has focused on its validation for use in body-image research. Thus, in several samples of female participants, Avalos et al. (2005) reported that the BAS has a unidimensional structure, shows good test–retest reliability after 3 weeks, and has good construct, discriminant, and incremental validity. A recent German translation of the BAS (Swami, Stieger, Haubner, & Voracek, 2008) similarly showed that it had a unidimensional structure for both women and men, and that the BAS was correlated with body- and self-esteem. Swami, Stieger, et al. also reported a small sex difference in BAS scores, with men scoring more positively than women.

The present study sought to extend earlier work by examining whether the sex difference in positive body image could also be found in a community sample of British women and men. More importantly, however, the present study examined personality and individual difference correlates of the BAS. Specifically, we sought to examine whether BAS scores could meaningfully be predicted by participants’ age, body mass index (BMI), educational qualifications, self-assessed attractiveness, media consumption, Big Five personality facets, and sex role internalisation. Given the exploratory nature of this study, no explicit hypotheses were formulated other than the prediction that men would evidence more positive body image than women.

Method

Participants

The participants of this study were a community sample of 101 women and 106 men (age M ± SD
women = 26.08 ± 12.04, men = 28.06 ± 12.71). Data collection took place in Greater London and the sample consisted of volunteers from a mix of occupational and living backgrounds. In terms of ethnicity, 45.9% of the sample were of European Caucasian descent, 30.4% were of Asian descent, 19.3% were of African Caribbean descent, and 4.4% were of other descent. The majority of participants were Christians (46.4%; atheists = 18.4%, Muslims = 17.4%, Jews = 11.6%, others = 6.2%) and were single (58.0%; in a dating relationship = 28.5%, married = 13.5%). In terms of educational qualifications, 14.5% of participants had been educated to a GCSE level, 64.7% to A-Level, and 20.8% to a degree level.

**Measures**

The data in this study were collected as part of a larger study on perceptions of figures varying in leg-to-body ratios (Swami, Frederick, Hadji-Michael, & Furnham, 2008). Aside from aesthetic judgements (not reported here), participants completed a three-page questionnaire consisting of several scales in the following order.

**Self-assessed attractiveness.** Participants were asked to provide ratings of the physical attractiveness of various body parts, such as their arms, feet, and eyes. Ratings were made on a 7-point scale (1 = Not at all physically attractive, 7 = Very physically attractive). For the purposes of the present study, only the item relating to participants’ self-assessed overall attractiveness was retained for analysis. Although not all single-item scales of this type are valid and most have been effectively criticised (Swami, Furnham, Georgiades, & Pang, 2007), they are nevertheless relatively robust and are reliably related to self- and other perceptions (e.g., Henderson-King, Henderson-King, & Hoffman, 2001; Little, Burt, Penton-Voak, & Perrett, 2001).

**Media consumption.** Participants reported their lifetime consumption of Western or British television, movies, magazines, and music (sample item: ‘In your lifetime, how much have you listened to Western or British music?’). All items were rated on a 7-point scale (1 = Not at all, 7 = Very much) and responses to the four items were averaged for all participants (α = .79).

**Abbreviated, 15-item Big Five Questionnaire (Furnham, McManus, & Scott, 2003).** This is a brief scale for assessing the Big Five personality facets, suitable for looking at population-level correlations. Ratings were made on a 5-point scale (1 = Strongly disagree, 5 = Strongly agree) and the five personality facets were arrived at by summing three items each. Alpha coefficients were as follows: openness (α = .65), conscientiousness (α = .60), extraversion (α = .62), agreeableness (α = .65), and neuroticism (α = .61). The Big Five Ms and SDs were in line with population norms, and although the internal consistencies were generally low, it should be noted that each trait was measured using only three items, and αs were, therefore, acceptable for the present purposes.

**Body Appreciation Scale (BAS; Avalos et al., 2005).** This is a 13-item scale developed to measure aspects of positive body image. All items were rated on a 5-point scale (1 = Never, 5 = Always), with higher scores reflecting greater body appreciation. Responses on all 13 items were averaged to obtain an overall body appreciation score (women α = .81, men α = .83). Previous work has shown the scale to have a unidimensional structure and good construct, discriminant, and incremental validity for both women and men (Swami, Stieger, et al., 2008).

**Bem Sex Role Inventory (BSRI; Bem, 1974).** The 60-item BSRI measures the extent to which men and women have internalised male-stereotypic (instrumentality; 20 items) and female-stereotypic (expressivity; 20 items) traits. The rest of the inventory (20 items) is composed of neutral items, which are perceived neither as men’s nor women’s characteristics. Participants assessed how well each of the 60 characteristics described themselves on a 7-point scale (1 = Almost never true, 7 = Almost always true). In the present study only the instrumentality (α = .82) and expressivity (α = .86) subscales were retained for analyses.

**Demographics.** Participants provided their demographic details, consisting of their sex, age, ethnicity, religion, highest educational qualification, marital status, height, and weight (the latter two items were used to calculate participants BMI, as kg/m2). Because of the existence of a number of BMI outliers for male participants, these data points (n = 8) were recoded so that these values fell just beyond the highest or lowest non-outlying value (cf. Tabachnick & Fidell, 2007).

**Procedure**

All participants were recruited opportunistically by the authors of this study. In practice, this meant approaching potential participants in various public locations and through personal contacts. Once participants provided informed consent, they were given a brief explanation of the task by either a male or female researcher (researcher sex did not have a significant effect on any of the ratings, all ps > .10). All participants took part on a voluntary basis and were debriefed following the study.

**Results**

**Descriptive statistics**

Means and SDs of all items are reported in Table 1. As shown, significant sex differences were found for participants’ BMI (with men having higher BMIs than women), openness to experience (men were more open than women), agreeableness (men were more agreeable than women), instrumentality scores on the BSRI (men had higher scores than women), and marital status (more men than women were married). Importantly, no sex difference was found on BAS scores when we conducted a one-way analysis of variance (d = .02; see Table 1). When we repeated this analysis, but covarying out participants’ BMI, the results again showed no sex difference in BAS scores, F(1, 204) = .22 p > .05.

**Predictors of body appreciation**

Inter-item correlations are reported in Table 1. As can be seen, men’s BAS scores were significantly positively correlated with highest educational qualification, self-assessed attractiveness, and instrumentality, and were...
also significantly negatively correlated with media consumption and neuroticism. On the other hand, women’s BAS scores were significantly positively correlated with highest educational qualification, self-assessed overall attractiveness, and instrumentality, and negatively correlated with age, media consumption, and neuroticism.

To examine predictors of body appreciation, we conducted a hierarchical multiple regression with BAS scores as the dependent variable and predictor variables entered in two blocks, namely personality and individual difference variables (self-assessed attractiveness, media consumption, Big Five traits, instrumentality, and expressivity) and demographic variables (age, BMI, highest educational qualification, and marital status). Participant sex was used as a moderating variable in this regression analysis. Results showed that the second step of the regression was significant, F(13, 206) = 16.59, p < .001, Adj. R² = .50. Specifically, self-assessed attractiveness (β = .43, t = 7.90, p < .001), highest educational qualification (β = .40, t = 6.99, p < .001), neuroticism (β = –.34, t = –6.14, p < .001), extraversion (β = .23, t = 3.74, p < .001), and BMI (β = –.13, t = –2.33, p < .05) all emerged as significant predictors of body appreciation.

**Discussion**

The results of this study extend previous work using the BAS (Avalos et al., 2005; Swami, Stieger, et al., 2008). First, our results showed no sex difference in body appreciation among a community sample of British adults. One possible reason for the discrepancy with a previous study that found a sex difference (Swami, Stieger, et al., 2008) may be that such a sex difference, where it does exist, is small. Indeed, the sex difference in BAS scores among Austrian adults appears to be small (Cohen’s d = .26), even if statistically significant (Swami, Stieger, et al., 2008). In light of these findings, it would be useful for future studies to investigate the reliability of this sex difference using more representative samples.

Second, our results showed that there were a number of individual difference predictors of body appreciation. Moderating for participants’ sex, it was noticeable that higher self-ratings of attractiveness were related to improved body appreciation. This is perhaps not surprising given the similar constructs that both scales measure, namely global self-perceptions, but it does have an important implication for attempts to improve an individual’s body image. Specifically, this result suggests that poor body image can be ameliorated by helping individuals to arrive at more confident and positive self-perceptions.

The present results also suggest that higher educational qualifications were related to improved body appreciation. It may be the case that higher education affords individuals greater resources with which to arrive at more positive body image. This may not only include greater financial resources (cf. Swami & Garcia Hernandez, 2008), but also personal means that improve psychological and physical health. In addition, higher neuroticism was associated with poorer body image. This finding is in line with previous studies that have shown neuroticism to have a positive association with negative body image (e.g., Davis, Shuster, Blackmore, & Fox, 2004), as well as a corrosive effect on variables associated with positive body image (e.g., Davis, Dionne, & Lazarus, 1996). By contrast, higher extraversion was related to more positive body appreciation, which is likewise consistent with the available literature on body image (Davis et al., 1996) as well as the negative association between extraversion and neuroticism (see Chamorro-Premuzic, 2007).
Several other results from the present study are noteworthy. First, it was surprising that participants' BMI was not significantly correlated with BAS in the present study. Previously, Swami et al. 2008 reported that BMI was significantly negatively correlated with women's ($r = -.28, p < .001$), but not men's body appreciation ($r = -.03, p > .05$). The lack of a similar association in the present study is puzzling, especially given the observed association between body size and greater body dissatisfaction among women (e.g., Paxton, Eisenberg, & Neumark-Sztainer, 2006). Even so, participants' BMI did emerge as a (weak) predictor of BAS scores once participant sex had been moderated. This discrepancy may be resolved in larger, more representative samples, or alternatively using more accurate measures of body fat percentage.

In addition, higher rates of media consumption were negatively associated with positive body image, although it did not emerge as a significant predictor of BAS scores. In general, this correlation is consistent with reports that the degree of media exposure is related to negative body image, especially where messages received from mass media are internalised (e.g., Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Finally, the present study showed that instrumentality scores from the BSRI were associated with improved body appreciation, which is consistent with previous work showing that masculine sex role orientation is positively associated with body satisfaction (Davis et al., 1996).

There are several ways in which the present study could be improved upon, primary among which is perhaps the use of more comprehensive measures. For instance, the abbreviated Big Five scale used in the present study could be replaced by more comprehensive measures, such as the Neuroticism–Extraversion–Openness Five Factor Inventory (Costa & McCrae, 1992). Moreover, there are many other individual difference variables that might be expected to be associated with positive body image that we have not examined, including internalisation of societal influences, peer and family dynamics, and self-objectification. Such limitations notwithstanding, the present study has shown that there are a number of individual difference predictors of body appreciation among British adults. These findings may prove useful in the design and implementation of programmes aimed at improving body image among women and men.

References